A.D. 1871, 11*th* MARCH. N° 655.

SPECIFICATION

OF

WILLIAM BAILEY.

TRUSSES.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
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1871.

A.D. 1871, 11*th* MARCH. N° 655.

Trusses.

LETTERS PATENT to William Bailey, of Wolverhampton, in the County of Stafford, for the Invention of "IMPROVEMENTS IN TRUSSES FOR HERNIA."—A communication from abroad by Edward Hickman, of the Township of Albion, in the Dominion of Canada.

Sealed the 7th September 1871, and dated the 11th March 1871.

PROVISIONAL SPECIFICATION left by the said William Bailey at the Office of the Commissioners of Patents, with his Petition, on the 11th March 1871.

I, WILLIAM BAILEY, of Wolverhampton, in the County of Stafford, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN TRUSSES FOR HERNIA," a communication to me from abroad by Edward Hickman, of the Township of Albion, in the Dominion of Canada, to be as follows:—

This Invention relates to certain improvements in the construction of trusses for hernia, the object being to enable people to wear them with ease without displacement under the various motions of the body unfettered by straps, to cause them to remain clean and durable, and in recent cases of hernia to promote a radical cure.

Bailey's Improvements in Trusses for Hernia.

The first improvement consists in the construction of the bearing pad applied to the spine, and forming the fulcrum of the spring, I make this somewhat of a saddle form with two bearers and an intervening arch, so that when applied to the spine the pressure is transferred to a point on each side of the bone, thus affording ease to the patient, and preventing the pad from slipping. The spring is adjusted to the pad by means of a screw passing through a slot or one of a series of holes, according to the required position of the pad over the hernial sac.

The next improvement consists in the construction of the hernial pad covering the hernia. I divide the convex surface of this with four separate curvilinear surfaces by means of two grooves or indentations, which crossing each other in the centre form a small concavity, and four bosses or inequalities which pressing separately on the parts covering and surrounding the hernial sac render it fixed in its position, and keep up an undisturbed and unintermittent pressure which is conducive to cure.

These parts I connect by the usual spring and screws common to what are called opposite sided trusses, but instead of leather I coat the steel and metal of which the pads and spring are made with vulcanite or varnish. I make the double truss with the same pads, only attaching the springs in the same manner as has been common heretofore. The hernial pad may be secured by a screw passing through the spring, and it may be made of a solid piece of vulcanite, but the compound or duplicate pad which bears on the sides of the spine shouid be dished or hollowed out, presenting concave external surfaces, and the screw will then take its bearing on the arch.

By these improvements all extraneous fastenings, such as straps, bands, or buckles are dispensed with, the truss being self-fastening when once adjusted in position; it is comfortable in wear, incapable of being soiled, and will last for a much longer period than the ordinary truss.

In order to form the double truss, I propose to fasten the backs of the springs on the saddle back, but, by preference, I make each of the duplicate back pads with a flat surface in lieu of the convexity, and I screw each spring into the side pads on their flat surfaces. Thus each hernial pad takes the same fulcrum from the spinal pad.

Bailey's Improvements in Trusses for Hernia.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said William Bailey in the Great Seal Patent Office on the 11th September 1871.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, WILLIAM BAILEY, of Wolverhampton, in the County of Stafford, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Eleventh day of March, in the year of our Lord One thousand eight hundred and seventy-one, in the thirty-fourth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said William Bailey, Her special licence that I, the said William Bailey, my executors, administrators, and assigns, or such others as I, the said William Bailey, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVEMENTS IN TRUSSES FOR HERNIA," a communication to me from abroad by Edward Hickman, of the Township of Albion, in the Dominion of Canada, upon the condition (amongst others) that I, the said William Bailey, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Willlam Bailey, do hereby declare the nature of my said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This Invention relates to certain improvements in the construction of trusses for hernia, the object being to enable persons to wear them with ease, and without the risk of displacement, under the various motions of the body, with or without straps, to cause them to remain clean and durable, and in recent cases of hernia to promote a radical cure.

Bailey's Improvements in Trusses for Hernia.

The first improvement consists in the construction of the bearing pad applied to the spine, and forming the fulcrum of the spring. I make this somewhat of a saddle form with two bearers and an intervening arch, so that when applied to the spine the pressure is transferred to a point on each side of the bone, thus affording ease to the patient and preventing the pad from slipping. The spring is adjusted to the pad by means of a screw passing through a slot, or one of a series of holes, according to the required position of the pad over the hernial sac.

The next improvement consists in the construction of the hernial pad covering the hernia. I divide the convex surface of this with four separate curvilinear surfaces by means of two grooves or indentations, which, crossing each other in the centre, form a small concavity and four bosses or inequalities of projecting surface, which pressing separately on the parts covering and surrounding the hernial sac render it fixed in its position, and keep up an undisturbed and unintermittent pressure which is conducive to cure.

These parts I connect by the usual spring and screws common to what are called opposite sided trusses, but instead of leather I coat the steel and metal of which the pads and spring are made with vulcanite or varnish. I make the double truss with the same pads, only attaching the springs in the same manner as heretofore. The hernial pad may be secured by a screw passing through the spring, and it may be made of a solid piece of vulcanite, but the compound or duplicate pad which bears on the sides of the spine should be dished or hollowed out, presenting concave external surfaces, and the screw will then take its bearing on the arch.

By these improvements all extraneous fastenings, such as straps, bands, or buckles are dispensed with, except in certain cases, and especially with double trusses straps may be used, the truss being self-fastening when once adjusted in position; it is comfortable in wear, incapable of being soiled, and will last for a much longer period than the ordinary truss.

In order to form the double truss I propose to fasten the backs of the springs on the saddle back, but, by preference, I make each of the duplicate back pads with a flat surface in lieu of the convexity, and I screw each spring into the side pads on their flat surfaces. Thus, each hernial pad takes the same fulcrum from the spinal pad.

Bailey's Improvements in Trusses for Hernia.

From the foregoing description the nature of the said Invention will be clearly understood by those conversant with the trusses referred to; but it must be stated that these trusses may be made with india-rubber bearings, or with tin plate or other metal foundation with a coating of varnish or vulcanite and soft india-rubber, or of tin plate or metal and vulcanite only. So also vulcanite alone may be used (in all these cases) without metal, or tin, or india-rubber for the pads. The foundation or base of the pad or pads of vulcanite will receive the binding screw; then the soft india-rubber bearing surface will serve for the saddle bearing and the hernial pad. The back of the foundation or base being of vulcanite or of metal may be made with a flush surface, but with any curve, so that the spring may bear along the outline of the curve secured by the screw.

I annex the accompanying Drawings, in which Fig. 1 represents a plan view of a double truss with a continuous spring connection between the hernial pads and the saddle back. This saddle back or bearing is shewn at *a*, and the hernial pads are shewn by *b*, *b*. In Fig. 2 the truss is shewn in two parts, each connected to the saddle as described; Fig. 3 shews a back view of the saddle for the single truss; Fig. 4, a view for the double truss; Fig. 5 shews a view of a single truss with the saddle back; Fig. 6 is a plan view of a vulcanite or compound pad, as described.

Of course the Drawing may be greatly varied so that the object of the Invention is met, that is to say, by corrugating or channelling the convex surface of the hernial pad to cause it to find a seating without the necessity of fastenings.

Fig. 7 shews a section of the hernial pad; and Fig. 8, a similar section; but in Fig. 7 the india-rubber is shewn by *c*, c^1, in case the pad should be cut in two by the line *x*, *y*; but in Fig. 8 the whole space divided by *x*, *y*, and shewn by *c*, c^1, may be india-rubber, but in all cases the construction of the truss will be on the principle first described.

Having now described the nature of the said Invention, and the manner in which the same is to be performed, I would remark that I do not limit myself to the precise details or configuration of parts described and shewn, as the same may obviously be varied or modified; but what I claim and desire to be secured to me by the herein in part

recited Letters Patent are, the general and specified improvements in the construction of trusses for hernia, substantially as herein described and shewn.

In witness whereof, I, the said William Bailey, have hereunto set my hand and seal, this Nineteenth day of August, in the year of our Lord One thousand eight hundred and seventy-one.

WILLIAM BAILEY. (L.S.)

Witness,

THOMAS JEFFERY.

LONDON:
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Printers to the Queen's most Excellent Majesty. 1871.

A.D.1871. Mar. 11. N° 655.
BAILEY'S Specification.

(1 SHEET)

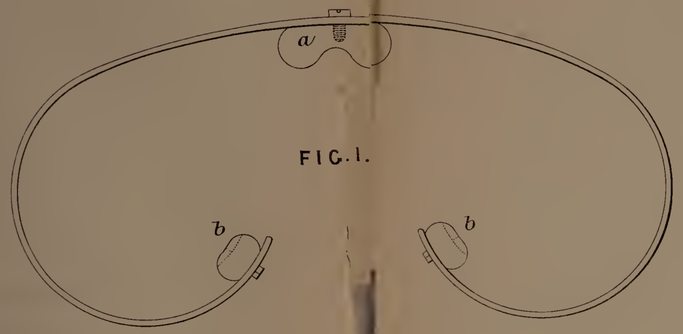


FIG.1.

FIG.3.

FIG.4.

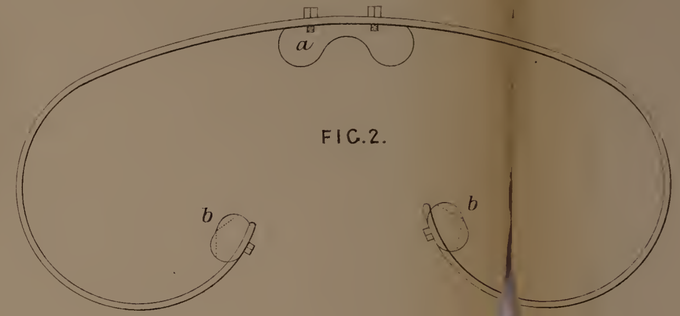


FIG.2.

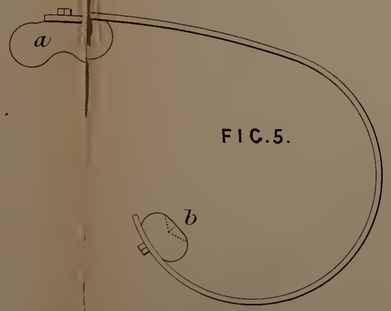


FIG.5.

FIG.6.

FIG.7.

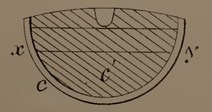
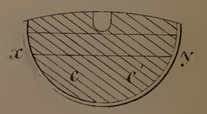


FIG.8.



The filed drawing is not colored.

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